
Proposed
INSECT AND DISEASE CONTROL PROJECTS
FOR CY 1965

Intermountain Area
(Southern Idaho, Nevada, Utah, Western Wyoming)

Submitted By
Intermountain Forest Pest Action Council
December 1, 1964

REPORT OF INTERMOUNTAIN FOREST PEST ACTION COUNCIL

The information reported herein is basically the same as reported to the Intermountain Forest Pest Action Council by U. S. Forest Service personnel at the annual meeting of the organization in Boise, Idaho, November 4, 1964.

CY 1964 INSECT AND DISEASE CONTROL PROPOSALS INTERMOUNTAIN AREA

SUMMARY

Overall insect infestations in the Intermountain area are even more serious than in 1963. Bark beetles remain the worst offenders, but defoliators also are troublesome.

The mountain pine beetle continues epidemic throughout much of the Intermountain area. The U. S. Forest Service, National Park Service and Bureau of Land Management are proposing to treat nearly 500,000 trees in five separate epidemics in eastern Idaho, western Wyoming, and northern Utah. Control in some areas has been effected after several years' treatment. The spruce budworm epidemic in Idaho persists. Some 525,000 acres were aerially sprayed in 1964 and an additional 700,000 acres are in need of spraying next year. Control plans are not firm pending review of monitoring results and insecticide tests. Following is a tabular listing of the projects presented in this report.

Map No.	Project Name	No. Infested Trees or Acres	Est. Cost		Values Protected
			FY '65	FY '66	
<u>NATIONAL PARK SERVICE (W. Wyoming)</u>					
1	Grand Teton N. P. Mtn. Pine Beetle	99,900 t	360,000		Recreational and Scenic
<u>BUREAU OF LAND MANAGEMENT (W. Wyoming and E. Idaho)</u>					
2	Driggs Area Mtn. Pine Beetle	500 t	\$ 25,000	-	Not Known
<u>U. S. FOREST SERVICE</u>					
1	Teton N. F. Mtn. Pine Beetle	205,000 t	\$786,000	\$100,000	1,000 MMBM \$3,000,000
2	Targhee N. F. Mtn. Pine Beetle	184,400 t	966,000	103,700	1,272 MMBM \$3,818,000
3	Wasatch N. F. Mtn. Pine Beetle	4,110 t	5,600	39,300	720 MMBM \$2,878,260
4	Cache N. F. Mtn. Pine Beetle	7,400 t	35,700	16,000	195 MMBM \$ 585,000

<u>Map</u> <u>No.</u>	<u>Project Name</u>	<u>No. Infested Trees</u> <u>or Acres</u>	<u>FY '65</u>	<u>FY '66</u>	<u>Values</u> <u>Protected</u>
5	Caribou N. F. Mtn. Pine Beetle	6,400 t	21,700	22,700	295 MMBM \$885,000
6	Salmon-Challis N. F.'s Spruce Budworm	700,000 a	900,000	224,000	21,000 MMBM \$126,350,000
None	Wasatch N. F. Dwarfmistletoe	1,200 a	5,500	11,800	Sapling Stand
Total Funds Needed All Projects			\$3,105,500	\$517,500	

DISCUSSION OF PROJECTS

1. Teton National Forest and Grand Teton National Park, Mountain Pine Beetle Control

The Teton National Forest and Grand Teton National Park infestations continue to carry heavy populations of mountain pine beetle. Infested trees are now found in large masses and the potential to increase is tremendous. There are an estimated 330,000 trees infested outside the Wilderness Area on the north end of the Teton National Forest. No survey was made within the Wilderness Area because of the impracticability of treating there.

The north treating boundary has been established at the Buffalo River. Within the treatment zone south of this line an estimated 205,000 trees are infested on National Forest land and 99,900 trees on National Park Service lands. At least 60,000 of the National Forest trees will be treated this fall with funds already made available. Additional trees will be removed by logging. The timber sale program for the infested area has been expanded substantially this year. A summary of the sales program follows this discussion.

The treatment on National Forest land is closely coordinated with that in Grand Teton National Park so that maximum protection is given to highest values in both the Park and the Forest.

A total of 228,000 trees were treated last year in this infestation--150,000 on National Forest land and 78,000 in Grand Teton National Park.

Areas which were treated last year show a definite reduction in numbers of new attacks. Many of the presently infested trees occur in areas which have not been infested previously during this epidemic. The expanded sales-treating program south of the Buffalo River control line should effectively check the spread to the south and east.

Teton N. F. Timber Sales in Infested Areas

District	Sale	Lodgepole Volume	Est. Beetle Trees	Status of Sale
A. Buffalo	Rosies Ridge	1.0 MM	2,500	Logged winter '62 Now closed
B. Buffalo	Black Rock	.75 MM	15,000	Logged winter '62 Now closed
C. Buffalo	Hatchet	2.0 MM		
D. Buffalo	Hatchet #2	4.5 MM	8,000	Sold Nov. 1964
E. Buffalo	Lilly Lake	3.5 MM	2,000	To be sold before July 1, 1965
F. Buffalo	Skull Cr. Meadows	5.0 MM (Est)	2,000	To be sold before July 1, 1965
G. Buffalo	Skull Cr. West	3.0 MM (Est)	2,000	To be sold before August 1, 1965
H. Buffalo	Baldy Mt.	5.0 MM (Est)	8,000	To be cruised before 12/30/64
I. Gros Ventre	Lost Cr. Saddle	1.6 MM	2,000	Sold Nov. 1964
J. Gros Ventre	Lost Cr.	1.0 MM	17,000	Logged winter '63 Now closed
K. Gros Ventre	Antelope Mt.	4.0 MM		
	Lower Spread Cr.	4.0 MM		
		31.350 MM	58,500	

2. Targhee National Forest, Mountain Pine Beetle

A survey of all infested areas on and adjacent to the Targhee National Forest, exclusive of the Rexburg District, showed there were 184,000 trees on five Ranger Districts and adjoining Bureau of Land Management and private lands. Sample plots taken on and near the Rexburg District indicated an average of 27 infested trees per acre on 35,000 acres or a total of 993,000 trees in that area.

No treatment was done last year on the Rexburg District and none is proposed for next year. This District is somewhat isolated from other stands in that area and it is hoped that the infestation will "burn itself out" in place without any considerable flight of beetles to other areas.

Some 60,000 trees were treated last year on National Forest land in the areas north of the Rexburg District. Removal of infested, merchantable trees by logging has been active. The local stud mill has cut very little timber outside of infested areas. A listing of the Targhee National Forest sales within infested areas follows this discussion.

The 1964 treatment reduced the number of infested trees within the treatment areas; however, the surrounding areas are more heavily infested this year than were the treated areas last year. This is an indication of the tremendous potential of this infestation. The Bureau of Land Management proposes to treat infested trees in areas adjoining the Targhee National Forest north and east of Driggs, Idaho. The area proposed for treatment is an extension of the infestation on National Forest lands.

Targhee N. F. Timber Sales in Infested Areas

<u>District</u>	<u>Sale</u>	<u>Lodgepole Volume</u>	<u>Est. Beetle Trees</u>	<u>Net Acres</u>	<u>Status of Sale</u>
Spencer	Blind Canyon	2.0 MM	156	156	Advertise Nov. 64
Spencer	Sheridan	.8 MM	800	200	Sell Spr. '65
Spencer	Howard Creek	1.0 MM	1,094	243	Completed 9/64
Spencer	Taylor Creek	1.7 MM	3,200	800	Completed 10/64
Island Park	Willow Cr. II	1.8 MM	686	343	Sold Oct. 1964
Island Park	Willow Cr. I	.6 MM	80	40	Completed 9/64
Island Park	Moose Creek	.5 MM	50	340	In progress
Ashton	High Point	.8 MM	558	186	Advertise 10/64
Ashton	Jackson Mill	1.0 MM	3,840	640	Prep. started 10/64
Ashton	Bishop Mountain	4.2 MM	3,600	900	Adv. winter 1964
Ashton	Lyle Springs	4.0 MM	156	626	In progress
Ashton	Elk Wallow	5.2 MM	6,100	1,525	In progress
Rexburg	Wolverine	1.8 MM	2,096	262	Sold Oct. 1964
Rexburg	Fish Creek	4.0 MM	5,796	483	Prep. Oct. 1964
Rexburg	Calamity	1.5 MM	600	200	Planned for 1965
Rexburg	Graham Springs	.4 MM	432	72	Planned for 1965
Rexburg	Canyon Creek	1.2 MM	4,575	183	Completed 10/65
Rexburg	Sheep Cr. II	.3 MM	222	37	In progress
Rexburg	Buckhorn Ridge	.7 MM	770	71	In progress
Rexburg	Sheep Creek I	<u>.5 MM</u>	138	<u>23</u>	Completed 11/62
TOTAL:		34.0 MM	34,949	7,330	

3. Wasatch National Forest, Mountain Pine Beetle

The infestation on the North Slope of the Wasatch National Forest should be completely suppressed with the treatment proposed. Treating and logging the past few years have removed infested trees as follows: 1964 - 12,500 trees; 1963 - 81,000 trees; 1962 - 165,000 trees; 1961 - 167,000 trees, 1960 - 166,000 trees. A few pockets of infestation still exist. These should be treated to eliminate the chance of the infestation rebuilding.

Costs of proposed treatment are relatively high because of the large area to be covered. To reduce spotting costs, treatment is proposed to start in late June after trees have begun to fade. Spotters can then be guided to infested groups by the current faders.

Costs to dismantle the four major insect control camps and restore the sites are included in the Fiscal Year 1966 costs.

4. Cache National Forest, Mountain Pine Beetle

The Cache National Forest contains two areas of infestation which developed independently. Over 20,000 infested trees were treated in 1964, the initial year of treatment.

The surveys this year show that the infestations were substantially reduced in numbers of infested trees. Treatment is needed to break up the remaining concentrations.

5. Caribou National Forest, Mountain Pine Beetle

Several areas of lodgepole on the Caribou National Forest contain outbreak numbers of mountain pine beetle infested trees. In 1964, two areas were proposed for treatment, but due to access problems only one of about 2,400 trees was treated. This was the initial treatment in the Caribou National Forest infestations.

This proposal is for cleanup treatment on the area treated in 1964 plus treatment of two new areas which appear to have the potential to develop into sizeable epidemics. A real effort is being made this fall to develop a sales program to remove the infested trees from the most seriously affected areas. Some road work is needed, however, and it is not likely that many of the trees currently infested will be logged in time to reduce the treating job against the present generation of insects.

6. Salmon and Challis National Forests, Spruce Budworm

The untreated spruce budworm infestations on the Salmon and Challis National Forests are continuing to defoliate already seriously damaged stands. Egg mass counts indicate populations will continue to be large in 1965. Close scrutiny of these infested stands indicates that more tree killing has occurred than has heretofore been recognized. The area of heavy damage has increased substantially in untreated areas.

Aerial spray projects in 1963 and 1964 have reduced the infested area by 200,000 and 525,000 acres, respectively. A comprehensive monitoring program was carried on in conjunction with the 1964 program, the results of which are not all available at this date. The data collected are to be studied and analyzed by Forest Service and Idaho State Fish and Game Department personnel.

Forest Service officials have indicated that the proposal to spray an additional 700,000 acres of this infestation is tentative and qualified. The study and analysis mentioned above will be completed before any decision is made as to insecticide, protective arrangements, and spray methods for any large-scale project proposal.

In the event a large project is not possible, an alternate project for testing Malathion concentrate and different dosages of oil solutions will be proposed.

Broadhead Meadows Dwarfmistletoe Control

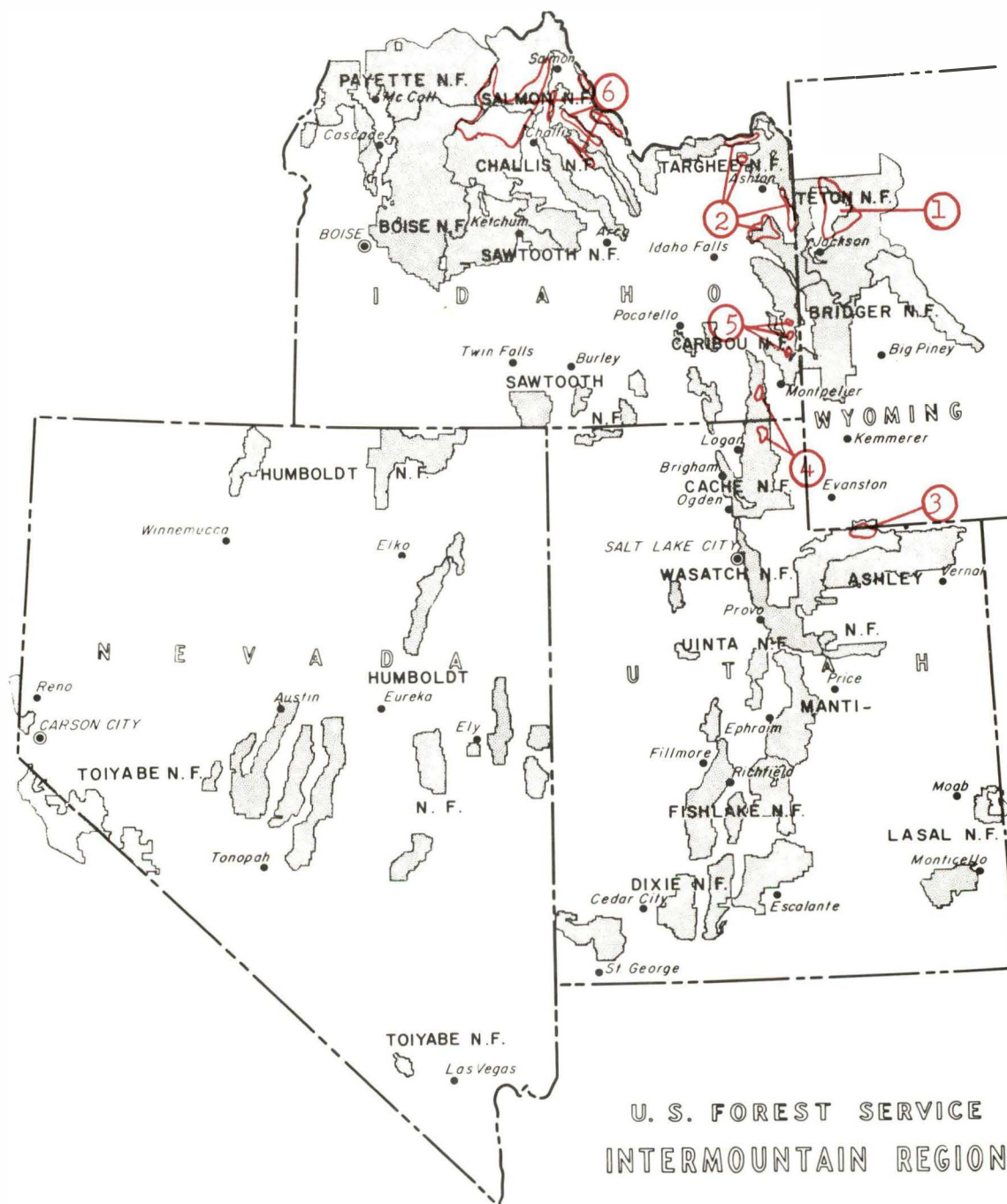
Those portions of the Broadhead Meadows cutover thirty to forty years ago now support large acreages of rapidly growing lodgepole pine much of which is 15 to 20 feet or more in height. The surrounding, uncut zones of old, overmature lodgepole pine are, for the most part, heavily infected with dwarfmistletoe which is in turn infecting the young stand. Also, some stands of trees or single, infected trees remaining in the old cutting area are inoculating the young trees.

The proposed operation is to prevent further infection by establishing a sanitation zone around the young stand, removing the few remaining sources of infection within it, and locating and removing the infected young trees.

The estimated costs are based on an evaluation made of the area in the summer of 1964 by a dwarfmistletoe evaluation crew. The results of the survey showed that eradication can be accomplished by treatment of about one-third of the area and the establishment of a sanitation zone to prevent reinoculation.

MAJOR FOREST INSECT OUTBREAKS 1964

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|---------------------------------|----------------------------------|
| 1 Mountain pine beetle, Teton | 4 Mountain pine beetle, Cache |
| 2 Mountain pine beetle, Targhee | 5 Mountain pine beetle, Caribou |
| 3 Mountain pine beetle, Wasatch | 6 Spruce budworm, Salmon-Challis |



U. S. FOREST SERVICE
INTERMOUNTAIN REGION